

SEQUENCE LISTING

<110> The Regents of the University of California
Wise, Arlene

<120> Detection Of Phenols Using Engineered Bacteria

<130> S-91,714

<140> 09/520,538

<141> 2000-03-08

<160> 17

<170> PatentIn version 3.0

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<212> DNA

<213> Pseudomonas sp. CF600

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cagtcttcag cgatggccag ctttcgcccc gaaatggtca ataccctggg catcgaacgc 180

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tcactcaagg gtctggtaa ggtccgcccc accgagctcg atatcgacaa ggaatacggg 360

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<213> Pseudomonas sp. CF600

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Gly Glu Gln Arg Met Leu Leu Leu Gln Ser Ser Ala Met Ala Ser Phe
35 40 45

Arg Arg Glu Met Val Asn Thr Leu Gly Ile Glu Arg Ala Lys Gly Leu
50 55 60

Phe Leu Arg His Gly Tyr Gln Ser Gly Leu Lys Asp Ala Glu Leu Ala
65 70 75 80

Arg Lys Leu Arg Pro Asn Ala Ser Glu Val Gly Met Phe Leu Ala Gly
85 90 95

Pro Gln Met His Ser Leu Lys Gly Leu Val Lys Val Arg Pro Thr Glu
100 105 110

Leu Asp Ile Asp Lys Glu Tyr Gly Arg Phe Tyr Ala Glu Met Glu Trp
115 120 125

Ile Asp Ser Phe Glu Val Glu Ile Cys Gln Thr Asp Leu Gly Gln Met
130 135 140

Gln Asp Pro Val Cys Trp Thr Leu Leu Gly Tyr Ala Cys Ala Tyr Ser
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Ser Ala Phe Met Gly Arg Glu Ile Ile Phe Lys Glu Val Ser Cys Arg
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Gly Cys Gly Gly
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Gly Glu Gln Arg Met Leu Leu Leu Gln Phe Ser Ala Met Ala Ser Phe
35 40 45

Arg Arg Glu Met Val Asn Thr Leu Gly Ile Glu Arg Ala Lys Gly Leu
50 55 60

Phe Leu Arg His Gly Tyr Gln Ser Gly Leu Lys Asp Ala Glu Leu Ala
65 70 75 80

Arg Lys Leu Arg Pro Asn Ala Ser Glu Val Gly Met Phe Leu Ala Gly
85 90 95

Pro Gln Met His Ser Leu Lys Gly Leu Val Lys Val Arg Pro Thr Gly
100 105 110

Leu Asp Ile Asp Lys Glu Tyr Gly Arg Phe Tyr Ala Glu Met Glu Trp
115 120 125

Ile Asp Ser Phe Glu Val Glu Ile Cys Gln Thr Asp Leu Gly Gln Met
130 135 140

Gln Asp Pro Val Cys Trp Thr Leu Leu Gly Tyr Ala Cys Ala Tyr Ser
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Ser Ala Phe Met Gly Arg Glu Ile Ile Phe Lys Glu Val Ser Cys Arg
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Gly Cys Gly Gly
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Gly Glu Gln Arg Met Leu Leu Leu Gln Phe Ser Ala Met Ala Ser Phe
35 40 45

Arg Arg Glu Met Val Asn Thr Leu Gly Ile Glu Arg Ala Lys Gly Leu
50 55 60

Phe Leu Arg His Gly Tyr Gln Ser Gly Leu Lys Asp Ala Glu Leu Ala
65 70 75 80

Arg Lys Leu Arg Pro Asn Ala Ser Glu Val Gly Met Phe Leu Ala Gly
85 90 95

Pro Gln Met His Ser Leu Lys Gly Leu Val Lys Val Arg Pro Thr Glu
100 105 110

Leu Asp Ile Asp Met Glu Tyr Gly Arg Phe Tyr Ala Glu Met Glu Trp
115 120 125

Ile Asp Ser Phe Glu Val Glu Ile Cys Gln Thr Asp Leu Gly Gln Met
130 135 140

Gln Asp Pro Val Cys Trp Thr Leu Leu Gly Tyr Ala Cys Ala Tyr Ser
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Ser Ala Phe Met Gly Arg Glu Ile Ile Phe Lys Glu Val Ser Cys Arg
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Gly Cys Gly Gly
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Gly Glu Gln Arg Met Leu Leu Leu Gln Phe Ser Ala Met Ala Ser Phe
35 40 45

Arg Arg Glu Met Val Asn Thr Leu Gly Val Glu Arg Thr Lys Gly Leu
50 55 60

Phe Leu Arg His Gly Tyr Gln Ser Gly Leu Lys Asp Ala Glu Leu Ala
65 70 75 80

Arg Lys Leu Arg Pro Asn Ala Ser Glu Val Gly Met Phe Leu Ala Gly
85 90 95

Pro Gln Met His Ser Leu Lys Gly Leu Val Lys Val Arg Pro Thr Glu
100 105 110

Leu Asp Ile Asp Lys Glu Tyr Gly Arg Phe Tyr Ala Glu Met Glu Trp
115 120 125

Ile Asp Ser Phe Glu Val Glu Ile Cys Gln Thr Asp Leu Gly Gln Met
130 135 140

Gln Gly Pro Val Cys Trp Thr Leu Leu Gly Tyr Ala Cys Ala Tyr Ser
145 150 155 160

Ser Ala Phe Met Gly Arg Glu Ile Ile Phe Lys Glu Val Ser Cys Arg
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Gly Cys Gly Gly
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Leu Thr Asn Leu Ile His Pro Gln Ser Met Glu Gly Lys Ile Trp Leu
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Gly Glu Gln Arg Met Leu Leu Leu Gln Phe Ser Ala Met Ala Ser Phe
35 40 45

Arg Arg Glu Met Val Asn Thr Leu Gly Ile Glu Arg Ala Lys Gly Leu
50 55 60

Phe Leu Arg His Gly Tyr Gln Ser Gly Leu Lys Asp Ala Glu Leu Ala
65 70 75 80

Arg Lys Leu Arg Pro Asn Ala Ser Glu Val Gly Met Phe Leu Ala Gly
85 90 95

Pro Gln Met His Ser Leu Lys Gly Leu Val Lys Val Arg Pro Thr Glu
100 105 110

Leu Asp Ile Gly Arg Glu Tyr Gly Arg Phe Tyr Ala Glu Met Glu Trp
115 120 125

Ile Asp Ser Pro Glu Val Glu Ile Cys Gln Thr Asp Leu Gly Gln Met
130 135 140

Gln Asp Pro Val Cys Trp Thr Leu Leu Gly Tyr Ala Cys Ala Tyr Ser
145 150 155 160

Ser Ala Leu Met Gly Arg Glu Ile Ile His Lys Glu Val Ser Cys Arg
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Gly Cys Gly Gly
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Met Pro Ile Lys Tyr Lys Pro Glu Ile Gln His Ser Asp Phe Lys Asp
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Leu Thr Asn Leu Ile His Pro Gln Ser Met Glu Gly Lys Ile Trp Leu
20 25 30

Gly Glu Gln Arg Met Leu Leu Gln Phe Ser Ala Met Ala Ser Phe
35 40 45

Arg Arg Glu Met Val Asn Thr Leu Gly Ile Glu Arg Ala Lys Gly Leu
50 55 60

Phe Leu Arg His Gly Tyr Gln Ser Gly Leu Lys Asp Ala Glu Leu Ala
65 70 75 80

Arg Lys Leu Arg Pro Asn Ala Ser Glu Val Gly Met Phe Leu Ala Gly
85 90 95

Pro Gln Met His Ser Leu Lys Gly Leu Val Lys Val Arg Pro Thr Glu
100 105 110

Leu Asp Ile Asp Lys Glu Tyr Gly Arg Phe Tyr Ala Glu Met Glu Trp
115 120 125

Ile Asp Ser Phe Glu Val Glu Ile Cys Gln Thr Asp Pro Gly Gln Met
130 135 140

Gln Asp Pro Val Cys Trp Thr Leu Leu Gly Tyr Ala Cys Ala Tyr Ser
145 150 155 160

Ser Ala Phe Met Gly Arg Glu Ile Ile Phe Lys Glu Val Ser Cys Arg
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Gly Cys Gly Gly
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<210> 17
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